



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/708,940

04/01/2004

Amit Bande

ORCL-002/OID-2003-258-01

2939

26392

7590

07/26/2006

LAW FIRM OF NAREN THAPPETA
C/O LANDON IP, INC.
1700 DIAGONAL ROAD, SUITE 450
ALEXANDRIA, VA 22314

EXAMINER

DWIVEDI, MAHESH H

ART UNIT

PAPER NUMBER

2168

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/708,940

Applicant(s)

BANDE ET AL.

Examiner

Mahesh H. Dwivedi

Art Unit

2168

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2, 4-6, 8-12, 14-16, 18-22, 24-26, and 28-29 are rejected under 35 U.S.C. 102(e) as being anticipated by **Ernst et al.** (U.S. PG PUB 2004/0103215).

3. Regarding claims 1 and 11, **Ernst** teaches a method and computer readable medium comprising:

A) determining whether to send said data in a compressed format (Paragraph 21, Figure 4);

B) if it is determined to send said data in said compressed format, compressing said data to generate compressed data using a compression approach and sending said compressed data to said second end system on said network (Paragraph 21, Figure 4);
and

C) otherwise, sending said data in an uncompressed format to said second end system on said network (Paragraph 21, Figure 4).

The examiner notes that “When routine 315 receives web server 310’s response to browser 325’s request for data (block 405), it determines whether the data contained therein is eligible for compression (decision block 410)” (Paragraph 21) is analogous to **“determining whether to send said data in a compressed format”**. The examiner further notes that “After compressing the data, routine 315 may update a metadata store it uses to track what data objects its has compressed (block 450) and then transmit the compressed data back to browser 325 (block 455)” (Paragraph 21) is analogous to **“if it is determined to send said data in said compressed format, compressing said data to generate compressed data using a compression approach and sending said compressed data to said second end system on said network”**. The examiner further notes that “If the data is not eligible for compression (the “NO” prong of decision block 410), the data received from the web server 310 during the acts of block 405 is passed or relayed to browser 325 without further processing (block 415)” (Paragraph 21) is analogous to **“otherwise, sending said data in an uncompressed format to said second end system on said network”**.

Regarding claims 2 and 12, **Ernst** further teaches a method and computer readable medium comprising:

A) wherein said determining checks a processing load on each of said first end system and said second end system (Paragraph 21, Figure 4); and

Art Unit: 2168

B) determines not to send said data in said compressed format if the processing load on either end system is determined to be more than a first threshold (Paragraph 21, Figure 4).

The examiner notes that “a further check is made to determine if the central processor unit executing routine 315 and/or designated to compress data for routine 315 is below a specified utilization (decision block 430). The check of block 430 may be performed to ensure that server 305 (or a functional unit associated with server 305) is not tasked to perform a computationally intensive job (the act of compressing data) if it is already heavily utilized for other tasks” (Paragraph 21) is analogous to “**wherein said determining checks a processing load on each of said first end system and said second end system**”. The examiner further notes that “a utilization threshold may be set at specified percentage of the processor’s total capacity. In some embodiments, this threshold may be set at the user’s discretion anywhere from 0% to 100%. For example 85%. If routine 315’s processor’s utilization is at or above the specified threshold (the “YES” prong of decision block 430), data received from web server 310 during the acts of block 405 is passed or relayed to browser 325 with further processing (block 415)” (Paragraph 21) is analogous to “**determines not to send said data in said compressed format if the processing load on either end system is determined to be more than a first threshold**”.

Regarding claims 4 and 14, **Ernst** further teaches a method and computer readable medium comprising:

Art Unit: 2168

A) wherein said determining checks a type of said data (Paragraphs 21 and 23, Figure 4); and

B) determines not to send said data in said compressed format if said type does not lend to substantial data compression (Paragraphs 21 and 23, Figure 4).

The examiner notes that “By way of example, data less than a specified size, or data already in a compressed format, or of a specified file type...may be designated “not eligible”. If the data is not eligible for compression (the “NO” prong of decision block 410), the data received from the web server 310 during the acts of block 405 is passed or relayed to browser 325 without further processing (block 415)” (Paragraph 21) is analogous to **“wherein said determining checks a type of said data”**. The examiner further notes that “By way of example, data less than a specified size, or data already in a compressed format, or of a specified file type...may be designated “not eligible”. If the data is not eligible for compression (the “NO” prong of decision block 410), the data received from the web server 310 during the acts of block 405 is passed or relayed to browser 325 without further processing (block 415)” (Paragraph 21) is analogous to **“determines not to send said data in said compressed format if said type does not lend to substantial data compression”**.

Regarding claims 5 and 15, **Ernst** further teaches a method and computer readable medium comprising:

A) wherein said determining examines a size of said data (Paragraph 21, Figure 4);
and

Art Unit: 2168

B) determines not to send said data in said compressed format if said size is small (Paragraph 21, Figure 4).

The examiner notes that "By way of example, data less than a specified size, or data already in a compressed format, or of a specified file type...may be designated "not eligible". If the data is not eligible for compression (the "NO" prong of decision block 410), the data received from the web server 310 during the acts of block 405 is passed or relayed to browser 325 without further processing (block 415)" (Paragraph 21) is analogous to **"wherein said determining examines a size of said data"**. The examiner further notes that "By way of example, data less than a specified size, or data already in a compressed format, or of a specified file type...may be designated "not eligible". If the data is not eligible for compression (the "NO" prong of decision block 410), the data received from the web server 310 during the acts of block 405 is passed or relayed to browser 325 without further processing (block 415)" (Paragraph 21) is analogous to **"determines not to send said data in said compressed format if said size is small"**.

Regarding claims 6 and 16, **Ernst** further teaches a method and computer readable medium comprising:

A) wherein said determining checks a speed of data transfer on said network (Paragraph 21, Figure 4); and

B) determines not to use said compressed format if said speed is high (Paragraph 21, Figure 4).

The examiner notes that “based on the determined transmission rate between web server 310 and browser 325 (in accordance with the acts of block 400) and the amount of time it takes to compress the data object, routine 315 can determine if the time it takes to compress the data object provides an acceptable speed-up in transmission (block 440)” (Paragraph 21) is analogous to **“wherein said determining checks a speed of data transfer on said network”**. The examiner further notes that “In one embodiment, if the time saved in transmitting the compressed data does not save more time (at the determined transmission rate between web server 310 and browser 325) than it takes to compress the data (the “NO” prong in decision block 440), the data received from web server 310 during the acts of block 405 is passed or relayed to browser 325 without further processing (block 415)” (Paragraph 21) is analogous to **“determines not to use said compressed format if said speed is high”**.

Regarding claims 8 and 18, **Ernst** further teaches a method and computer readable medium comprising:

A) wherein said speed is determined by including a first local time stamp in a packet sent to said second end system, and receiving a second time stamp and a third time stamp from said second end system at a time specified by a fourth local time stamp, wherein said second time stamp indicates a time at which said packet is received in said second end system and said third time stamp indicates a time at which said packet is sent from said second end system, wherein said speed is determined based on said

Art Unit: 2168

first local time stamp, said second time stamp, said third time stamp, and said fourth time stamp (Paragraph 25, Figure 9).

Regarding claims 9 and 19, **Ernst** further teaches a method and computer readable medium comprising:

A) wherein said first end system comprises one of a database server and a database client (Paragraph 20, Figure 3); and

B) said second end system comprises the other one of said database server and said database client (Paragraph 20, Figure 3).

The examiner notes that Figure 3 of **Ernst** shows a remote client (320) connected to a server (310) via a communications link 330.

Regarding claims 10 and 20, **Ernst** further teaches a method and computer readable medium comprising:

A) wherein said data comprises software instructions (Paragraph 28).

The examiner notes that “In addition, acts in accordance with FIGS. 4, 5, 6, 8, and 9 may be performed by a programmable control device executing instructions organized into a program module (e.g. routine 315)” (Paragraph 28) is analogous to **“wherein said data comprises software instructions”**.

Regarding claim 21, **Ernst** teaches an apparatus comprising:

Art Unit: 2168

A) means for determining whether to send said data in a compressed format

(Paragraph 21, Figure 4);

B) means for compressing said data to generate compressed data using a compression approach and means for sending said compressed data to said second end system on said network if it is determined to send said data in said compressed format (Paragraph 21, Figure 4); and

C) means for sending said data in an uncompressed format to said second end system on said network otherwise (Paragraph 21, Figure 4).

The examiner notes that “When routine 315 receives web server 310’s response to browser 325’s request for data (block 405), it determines whether the data contained therein is eligible for compression (decision block 410)” (Paragraph 21) is analogous to **“means for determining whether to send said data in a compressed format”**. The examiner further notes that “After compressing the data, routine 315 may update a metadata store it uses to track what data objects its has compressed (block 450) and then transmit the compressed data back to browser 325 (block 455)” (Paragraph 21) is analogous to **“means for compressing said data to generate compressed data using a compression approach and means for sending said compressed data to said second end system on said network if it is determined to send said data in said compressed format”**. The examiner further notes that “If the data is not eligible for compression (the “NO” prong of decision block 410), the data received from the web server 310 during the acts of block 405 is passed or relayed to browser 325 without further processing (block 415)” (Paragraph 21) is analogous to **“means for sending**

said data in an uncompressed format to said second end system on said network otherwise”.

Regarding claim 22, **Ernst** further teaches an apparatus comprising:

- A) wherein said means for determining checks a processing load on each of said first end system and said second end system (Paragraph 21, Figure 4); and
- B) determines not to send said data in said compressed format if the processing load on either end system is determined to be more than a third threshold (Paragraph 21, Figure 4).

The examiner notes that “a further check is made to determine if the central processor unit executing routine 315 and/or designated to compress data for routine 315 is below a specified utilization (decision block 430). The check of block 430 may be performed to ensure that server 305 (or a functional unit associated with server 305) is not tasked to perform a computationally intensive job (the act of compressing data) if it is already heavily utilized for other tasks” (Paragraph 21) is analogous to **“wherein said means for determining checks a processing load on each of said first end system and said second end system”**. The examiner further notes that “a utilization threshold may be set at specified percentage of the processor’s total capacity. In some embodiments, this threshold may be set at the user’s discretion anywhere from 0% to 100%. For example 85%. If routine 315’s processor’s utilization is at or above the specified threshold (the “YES” prong of decision block 430), data received from web server 310 during the acts of block 405 is passed or relayed to browser 325 with further

Art Unit: 2168

processing (block 415)" (Paragraph 21) is analogous to **"determines not to send said data in said compressed format if the processing load on either end system is determined to be more than a third threshold"**.

Regarding claim 24, **Ernst** further teaches an apparatus comprising:

- A) wherein said means for determining checks a type of said data (Paragraphs 21 and 23, Figure 4); and
- B) determines not to send said data in said compressed format if said type does not lend to substantial data compression (Paragraphs 21 and 23, Figure 4).

The examiner notes that "By way of example, data less than a specified size, or data already in a compressed format, or of a specified file type...may be designated "not eligible". If the data is not eligible for compression (the "NO" prong of decision block 410), the data received from the web server 310 during the acts of block 405 is passed or relayed to browser 325 without further processing (block 415)" (Paragraph 21) is analogous to **"wherein said means for determining checks a type of said data"**. The examiner further notes that "By way of example, data less than a specified size, or data already in a compressed format, or of a specified file type...may be designated "not eligible". If the data is not eligible for compression (the "NO" prong of decision block 410), the data received from the web server 310 during the acts of block 405 is passed or relayed to browser 325 without further processing (block 415)" (Paragraph 21) is analogous to **"determines not to send said data in said compressed format if said type does not lend to substantial data compression"**.

Regarding claim 25, **Ernst** further teaches an apparatus comprising:

- A) wherein said means for determining examines a size of said data (Paragraph 21, Figure 4); and
- B) determines not to send said data in said compressed format if said size is small (Paragraph 21, Figure 4).

The examiner notes that “By way of example, data less than a specified size, or data already in a compressed format, or of a specified file type...may be designated “not eligible”. If the data is not eligible for compression (the “NO” prong of decision block 410), the data received from the web server 310 during the acts of block 405 is passed or relayed to browser 325 without further processing (block 415)” (Paragraph 21) is analogous to **“wherein said means for determining examines a size of said data”**. The examiner further notes that “By way of example, data less than a specified size, or data already in a compressed format, or of a specified file type...may be designated “not eligible”. If the data is not eligible for compression (the “NO” prong of decision block 410), the data received from the web server 310 during the acts of block 405 is passed or relayed to browser 325 without further processing (block 415)” (Paragraph 21) is analogous to **“determines not to send said data in said compressed format if said size is small”**.

Regarding claim 26, **Ernst** further teaches an apparatus comprising:

- A) wherein said means for determining checks a speed of data transfer on said network (Paragraph 21, Figure 4); and
- B) determines not to use said compressed format if said speed is high (Paragraph 21, Figure 4).

The examiner notes that “based on the determined transmission rate between web server 310 and browser 325 (in accordance with the acts of block 400) and the amount of time it takes to compress the data object, routine 315 can determine if the time it takes to compress the data object provides an acceptable speed-up in transmission (block 440)” (Paragraph 21) is analogous to **“wherein said means for determining checks a speed of data transfer on said network”**. The examiner further notes that “In one embodiment, if the time saved in transmitting the compressed data does not save more time (at the determined transmission rate between web server 310 and browser 325) than it takes to compress the data (the “NO” prong in decision block 440), the data received from web server 310 during the acts of block 405 is passed or relayed to browser 325 without further processing (block 415)” (Paragraph 21) is analogous to **“determines not to use said compressed format if said speed is high”**.

Regarding claim 28, **Ernst** further teaches an apparatus comprising:

- A) wherein said means for determining includes a first local time stamp in a packet sent to said second end system, and receives a second time stamp and a third time stamp from said second end system at a time specified by a fourth local time stamp, wherein

said second time stamp indicates a time at which said packet is received in said second end system and said third time stamp indicates a time at which said packet is send from said second end system, wherein said speed is determined based on said first local time stamp, said second time stamp, said third time stamp, and said fourth time stamp (Paragraph 25, Figure 9).

Regarding claim 29, **Ernst** further teaches an apparatus comprising:

- A) wherein said first end system comprises one of a database server and a database client (Paragraph 20, Figure 3); and
- B) said second end system comprises the other one of said database server and said database client (Paragraph 20, Figure 3).

The examiner notes that Figure 3 of **Ernst** shows a remote client (320) connected to a server (310) via a communications link 330.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 3, 13, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ernst et al.** (U.S. PG PUB 2004/0103215 as applied to claims 1-2, 4-6, 8-12, 14-16, 18-22, 24-26, and 28-29 and in view of **Shah et al.** (U.S. Patent 7,043,524).

6. Regarding claims 3, 13, and 23, **Ernst** does not explicitly teach a method, computer readable medium, and apparatus comprising:

A) wherein said processing load is checked periodically.

Shah, however, teaches “**wherein said processing load is checked periodically**” as “The Monitor Server 108—It monitors the load in terms of percent of CPU utilization on the Application Servers 107 and the License Servers 106 on a periodic basis (for example—every minute)” (Column 9, lines 27-31).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Shah’s** would have allowed **Ernst’s** to allow for an automated method to give client

systems a reduced load for streaming data via requests to corresponding servers, as noted by **Shah** (Column 2, lines 29-34).

7. Claims 7, 17, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ernst et al.** (U.S. PG PUB 2004/0103215 as applied to claims 1-2, 4-6, 8-12, 14-16, 18-22, 24-26, and 28-29 and in view of **Somekh et al.** (U.S. PG PUB 2003/0123466).

8. Regarding claims 7 and 17, **Ernst** does not explicitly teach a method and computer readable medium comprising:

A) wherein said speed is determined by sending an ICMP echo packet.

Somekh, however, teaches “**wherein said speed is determined by sending an ICMP echo packet**” as “Optionally, the round trip delay of packets on the network 38 included in the current MoIP connection 30, is measured by transmitting an echo request packet (e.g., an ICMP echo request) from one of the gateways 36 to the other and measuring the time between transmitting the echo request and receiving the response thereto, from the other gateway” (Paragraph 201).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Somekh's** would have allowed **Ernst's** to provide a method to allow for calculating utilization speeds for potential transfers of data.

Regarding claim 27, **Ernst** does not explicitly teach an apparatus comprising:

A) wherein said means for determining determines said speed by sending an ICMP echo packet.

Somekh, however, teaches “wherein said means for determining determines said speed by sending an ICMP echo packet” as “Optionally, the round trip delay of packets on the network 38 included in the current MoIP connection 30, is measured by transmitting an echo request packet (e.g., an ICMP echo request) from one of the gateways 36 to the other and measuring the time between transmitting the echo request and receiving the response thereto, from the other gateway” (Paragraph 201).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Somekh's** would have allowed **Ernst's** to provide a method to allow the ability to give more or less weight to preferred advertisers on an individual basis to ensure dependable advertisements, as noted by **Somekh** (Paragraphs 116, 119).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. PGPUB 2004/0205249 issued to **Berry** on 14 October 2004. The subject matter disclosed therein is pertinent to that of claims 1-29 (e.g., determining whether to compress data to a requesting client).

U.S. PGPUB 2005/0210151 issued to **Abdo et al.** on 22 September 2005. The subject matter disclosed therein is pertinent to that of claims 1-29 (e.g., determining whether to compress data to a requesting client).

U.S. PGPUB 2005/0268068 issued to **Ignatius et al.** on 01 December 2005. The subject matter disclosed therein is pertinent to that of claims 1-29 (e.g., determining whether to compress data to a requesting client).

U.S. PGPUB 2002/0184224 issued to **Haff et al.** on 05 December 2002. The subject matter disclosed therein is pertinent to that of claims 1-29 (e.g., determining whether to compress data to a requesting client).

Contact Information

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mahesh Dwivedi whose telephone number is (571) 272-2731. The examiner can normally be reached on Monday to Friday 8:20 am – 4:40 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo can be reached (571) 272-3642. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should


Art Unit: 2168


you have questions on access to the Private PAIR system, contact the Electronic
Business Center (EBC) at 866-217-9197 (toll-free).

Mahesh Dwivedi

Patent Examiner

Art Unit 2168


July 14, 2006


Leslie Wong

Primary Examiner